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ANTIBIOTIC RESISTANCE CONFRONTING THE GLOBAL CRISIS

**PLUS: Brexit; Flooding in France; Nanoparticles & First Responders;
Agriculture & terrorism; Search & Rescue in Antarctica; Crisis leadership;
Stability policing; Public information & social media; Conflict de-escalation;
Robotic developments; Command & Control in the 21st Century**

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Cover illustration: Алексей Нуждин | 123rf

comment

As usual, this edition spans emergency and disaster analysis, prevention, protection, preparedness, response and resilience.



Admittedly, it is equally morbidly fascinating and disturbing to see how crises intersect, conflating and exacerbating one another, spawning greater emergencies that appear simply beyond the scope of prevention or mitigation, sometimes leaving agencies seemingly powerless to respond effectively to their sheer scale and complexity. But how bad is the global situation? After all, it is not beyond experts' capabilities to predict, identify and categorise tomorrow's most devastating disasters. Terrorism, natural catastrophes, conflict: This edition addresses and provides insight into all of the above.

At this time, we don't have definitive statistics for 2016. But, despite the widely-held perception that terrorist attacks are increasing, the US State Department's annual terrorism report notes a 13 per cent decrease in attacks in 2015, with 14 per cent fewer deaths. This year's figures might be higher (page 52), and modus operandi may be shifting, but the line between criminality and terrorism has become blurred, and we must be wary of classifying all violent criminal acts as terrorism, as Christine Jessup warns (page 54).

Again, we know that natural disasters are on the rise. But Munich Re says last year saw a fall in losses from such catastrophes in terms of incidents, fatalities and in financial losses.

Granted, these figures are in no way cause for complacency; we are certain to face larger and more complex emergencies in the future. But there is an even greater lurking disaster, which CRJ has touched upon in past editions (Prof Steiner, CRJ 10:1); one that we can no longer afford to ignore. Deaths in a world without antibiotics could dwarf all other catastrophes, killing up to ten million people a year (page 26).

How sobering it is to reflect that, despite all our technological advances, prevention, co-operation and hard work in crises and disasters, an absence of antibiotics would not only claim more lives than climate, conflict and terrorism combined, but augment their effects immeasurably. Let's hope that the high level UN meeting on this subject in September produces the unequivocal commitment that this smouldering global health emergency demands.

Emily Hough



Struggling with 'dark dynamics'

Our crisis management techniques cannot handle today's unmapped and poorly understood critical challenges, says **Patrick Lagadec**. It is time for training to challenge leaders to cope with the unknown

Our complex and vulnerable societies are experiencing the challenges of emerging systemic crises. Bedrocks are being shaken, social fabrics cracked, and our conventional safety barriers submerged. Crises detonate in new liquefied and tightly coupled contexts, prone to swift global tremors.

Our best crisis management techniques have not been designed for such a context. Even crisis communication, the iconic motto of our times, is in disarray. Social media, the new child of the communication family, is impressive in its speed and scale, but is not the silver bullet.

This landscape is the same on every single front, whether environmental, technological, economic, safety or security, or even with regard to society as a whole. Take recent events in France: A complex terrorist attack in Paris (November 2015); another blow on Bastille day; and the most recent killing of a priest in Church; 'unseasonal' flooding (page 16), endless strikes with outbursts of violence, including rioters vandalising a children's hospital in Paris; and hooliganism turmoil linked to the Euro 2016 football competition. But 'unthinkable' eruptions are also bursting forth on a global level, often intertwined. Examples include the November 2015 lockdown in Brussels and the 2013 lockdown in Boston, gigantic fires attacking Fort McMurray, the Orlando massacre – which followed a similar pattern to the Bataclan theatre attacks in Paris, and the Brussels airport attacks in March 2016, which were linked to the Paris attacks.

At the same time, Europe is stunned and crumbling under the endemic challenges of a migrant influx, and an active disassembly line of institutional 'exits' looming on the agenda. The unmappable Brexit is just the latest news of the day.

It is certainly crucial that conventional abilities continue to be developed strongly: technical tools, organisational designs, communication protocols and the use of social networks have to be constantly improved. But the essential issue is one of leadership. Because if you no longer know where to go, turbulent environments rapidly transform any tactical difficulties into a series of strategic quagmires.

In fact, the challenge is colossal: decision-makers have to deal with off-scale, unknown, chaotic, fast mutating realities, fragile expertise, unprepared mindsets and media rules demanding simple-short-comfortable answers. This is all often foreign to organisational culture, knowledge, and preparation. To borrow an image from physics, it is time to clarify some operational keys to help upgrade the preparedness of leaders to deal with these dark dynamics. They are dark because they are unmapped and poorly understood but are, in fact, absolutely crucial.

This new brave world calls for at least some

basic moves, the first being specific seminars on leadership mindsets to cope with the unknown.

Officials have been prepared to deal with well-defined situations, within clear-cut typologies in globally stable contexts. Leaders are generally chosen for their efficiency in the use of the best answers and managerial techniques – and this paradigm is especially dominant in the emergency world. The initial and essential rupture today is to quit that mindset, to switch from response to questioning. A leader's task is to struggle with the unknown, to open up unmapped roads – not to co-ordinate a set of conventional responses brought by a predefined mix of well-known players according to specific plans. This is very hard, both culturally and psychologically, since such a struggle with questions means that individuals and teams are rapidly thrown into the void, forced into the wild land of discoverers, far from the managerial or administrative spheres. The key battlefield is the blind spot. The critical point is not to act rapidly, but rather take time to reflect and wonder: "Which questions did we forget to ask? What are the hidden challenges, the invisible dark matter, and intractable dark dynamics?"

The operational translation of such a demand is well known, even if rarely applied; leaders, executives, and their immediate aides must be prepared during specific seminars devoted to helping them to change visions, grammars, and reflexes. Posing impossible questions is the ultimate stage; but if leaders want to find the appropriate pathways and operational responses, they have to go through this kind of challenging and surprising seminar to discover how to envision, tackle and navigate uncharted waters. This is a critical step to avoid immediate paralysis when confronted by unreadable dynamics.

The dynamics of such seminars demand that ready-made PowerPoint presentations are banned; pre-planned responses and organisational maps must be put aside. The only objective is to give leaders the opportunity to feel, understand, and test the kind of void, beyond borders, that a crisis has in store. And if executives refuse to participate in such seminars, they should be considered incapable of leading in today's crises.

The next move is that of specific drills. Crisis exercises are common, but their scenarios are rarely devised to put leaders to the test and to train them. Instead, participants are expected to react, co-ordinate and communicate. It is very rare to see real surprises – such as the recent flooding of the Seine, where the floodwaters rose during the 'wrong' season, from the 'wrong' tributaries and where critical sensors were out of order. It is even rarer that leaders are afforded the opportunity to be confronted with the unknown, to deal with experts in the void, to interact with unfamiliar actors, and to grasp a systemic issue with no borders. Drills are generally emergency-based scenarios that do not really test leadership.

A decisive leap is now necessary. And leaders have to be convinced to participate in such critical exercises, which must be short. A large-scale exercise, stretching day and night over two days, is only appropriate when the objective is to see how individuals can resist fatigue. The real issue is to train leaders in developing their creative ability to navigate the unknown.

In a nutshell, the fundamental concept of exercises and drills has to be rethought and redesigned if we want to prepare top-level decision-makers to lead in our chaotic world. The good news is that such a breakthrough is not that difficult: it only requires a clear view of what is necessary today, some operational capacity to drive such drills, and above all the courage to engage that crucial mutation.

We are used to considering that our leaders are advised by technical specialists who bring the best expertise, clarifying uncertainty and presenting the few remaining options. The point now is to establish a group of experts in the unknown who, from the very start, have to work on four questions: What is the essence of the problem? What are the traps? Who are the actors? And, last but not least, what could be the few dynamics

Which questions did we forget to ask? What are the hidden challenges, the invisible dark matter and intractable dark dynamics?

to inject in the system that would help to navigate creatively?

This is the concept of the Rapid Reflexion Force (RRF), which I have developed within some advanced organisations in various countries. The objective is to help the leadership to envision their role and to clarify their navigation. It has proven to be extremely efficient and appropriate.

Operationally, the process demands two main steps, the first being to establish and train an RRF, which means finding individuals who would be stimulated by such a creative job. This is not that difficult since many are more than happy to work within that framework. The next step is to prepare leaders to interact creatively with that group. Obviously, the RRF is there to help, and in no way intended to replace the leadership.

The real difficulty is not technical, but cultural, so the governing principle has to be changed: the objective is not to find 'the' good solution in the usual toolbox, but to clarify the strategic maps into the unknown, and to prepare creative answers. Experience in the field shows that it is not that difficult to have everyone understand that the Rapid Reflexion Force is in fact extremely useful (see *CRJ*, 3:2 and 4:2).

Obviously, a more global preparation is necessary, preparing everyone to open their minds and capacities for this new brave world of the unknown. It requires that everyone maintains excellence in his or her specific job, knowing better than ever the best processes and usual responses. But, in addition, it demands the ability to envision total surprise, deep changes and mutations in visions, objectives, and operational rules. The intrinsic difficulty is that in the crisis world, the bulk of our preparation in all cultures, tends to produce rigid postures and fixed codes and responses.

The practical avenue to success lies in bold personal engagement of leaders, large conferences for all in order to clarify the new challenges and positive dynamics to confront them.

The message should be clear: "Yes, you must keep your competence; but, in addition, we need your intelligence, your practical ability to navigate the chaotic world."

Three years ago a vice-president in Silicon Valley told his employees: "Now on, the unknown is your field of responsibility." This comment applied to new discoveries, but it should also be considered as the fundamental mindset in crisis handling and preparation.

Our global crisis landscape is one of shockwaves that rupture the environment, technology, economics, safety and security, affecting society as a whole. But leaders have been trained to deal with well-defined situations with clear cut typologies in globally stable contexts. It is time for this to change

Philippe Plailly | Science Photo Library

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